Name:

at1110paper_practice_test (v32)

1. Expand the following expression into standard form.

$$(8x - 7)(4x - 5)$$

$32x^2 - 40x - 28x + 35$

$32x^2 - 68x + 35$

2. Solve the equation.

$$(6x - 5)(8x + 9) = 0$$

$x = \frac{5}{6}$ $\quad$ $x = \frac{-9}{8}$

3. Expand the following expression into standard form.

$$(3x - 4)(3x + 4)$$

$9x^2 + 12x - 12x - 16$

$9x^2 - 16$

4. Expand the following expression into standard form.

$$(9x - 2)^2$$

$81x^2 - 18x - 18x + 4$

$81x^2 - 36x + 4$

5. Factor the expression.

$$x^2 + 7x + 12$$

$$(x + 4)(x + 3)$$

6. Factor the expression.

$$64x^2 - 81$$

$$(8x + 9)(8x - 9)$$

7. Solve the equation with factoring by grouping.

$$10x^2 - 8x + 15x - 12 \;=\; 0$$

$$(2x + 3)(5x - 4) = 0$$

$$x = \frac{-3}{2} \qquad x = \frac{4}{5}$$

8. Solve the equation.

$$11x^2 - 20x + 13 \;=\; 4x^2 + 3x - 5$$

$$7x^2 - 23x + 18 = 0$$

$$(7x - 9)(x - 2) = 0$$

$$x = \frac{9}{7} \qquad x = 2$$